

PRODUCT OVERVIEW

LEVEL MEASUREMENT

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LC12S Series Capacitance Level Sensors

(Truck, Bus... Fuel Tank/Water tank /Underground tank...)



Characters:

- ☆ Accuracy: $\leq \pm 0.5\% \text{F.S.}$
- ☆ High stability and reliability
- ☆ Precise linear and temperature compensation
- ☆ Support local ZERO and SPAN calibration
- ☆ Adjustable damp output time
- ☆ Strong interference resistance
- ☆ Strong shock resistance
- ☆ Surge, over-current and polarity resistant design
- ☆ Applicable for various liquids

Applications:

- ★ Diesel Tank Level Measurement
- ★ Liquid level measurement
- ★ Gasoline level measurement
- ★ Underground fuel tank level measurement
- ★ Industry Process Level Measurement
- ★ Auto, Truck fuel tank level measurement
- ★ Rooter, railway engine, tanker oil and fuel level measurement
- ★ Sealed tank liquid level measurement
- ★ And so on

I. Profiles:

LC12S capacitance liquid-level sensor is the customized sensor meter for precise measuring of the liquid level of automobile oil tanks, sealed tankers, trucks fuel tank, locomotives tanks and oil depots, etc.

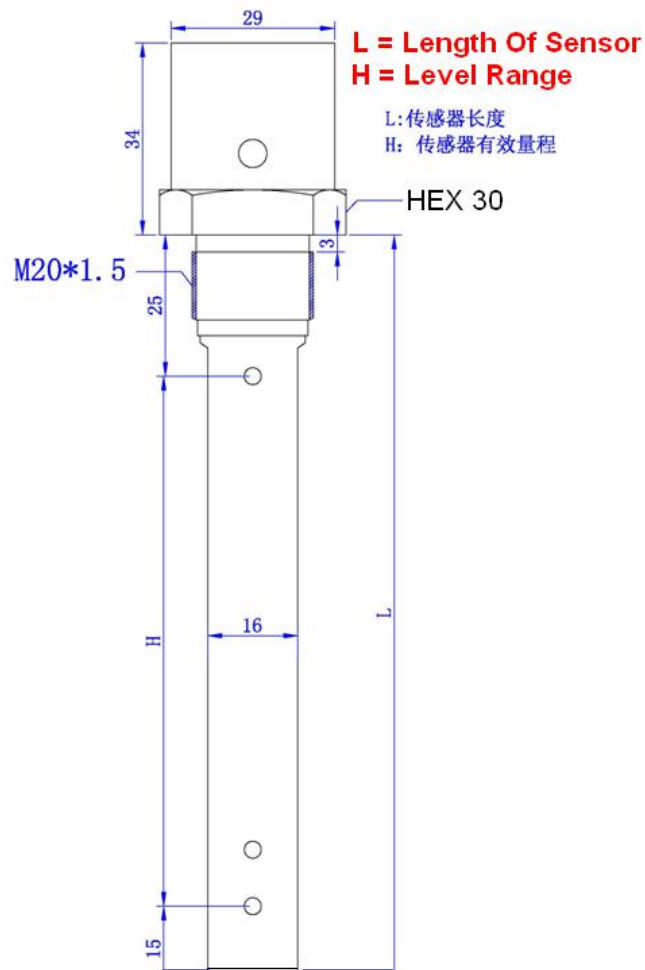
The whole sensor is free of any mobile or elastic part and is featured with the good impact resistance, convenient installation, high reliability, high precision, and stable performance. It can not only be installed on various occasions requiring precise level measuring of gasoline, diesel, water and hydraulic oil, etc, but also be Application for measuring of various non-conductive liquids..

In addition, it can be used for conductive medium measuring on occasions with quite poor conditions, quite serious electromagnetic interference, or dramatic stirring. Sensor support client's local calibration zero and span, so that sensor can use very easy for different mediums and with a very high precision reading data.

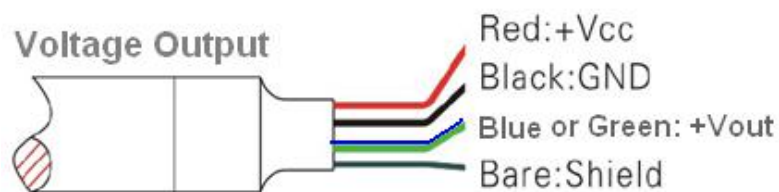
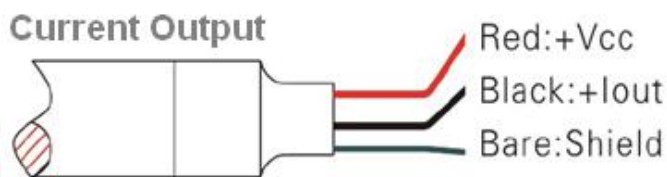
II. Specifications:

| Model: Parameter: | LC12S Series | |
|--|--|-----------|
| Pressure Range: | 0-500 mm optional | |
| Probe Diameter: | Φ12 mm | |
| Overload: | Standard atmosphere pressure or -1 Bar~40 Bar available | |
| Accuracy: (Linearity; Hysteresis; Repeatability) | $\leq \pm 1.0\%F.S$ Typical $\leq \pm 0.5\%F.S$; Optional | |
| Resolution: | 0.01 mm | |
| Blind Zone: | 15 mm | |
| Stability: | Standard: 0.01%F.S/3 years, Max: 0.02%F.S/3years | |
| Working Temp: | -30~85°C standard type, -40°C~125°C are customized. | |
| Storage Temp: | -50°C~125°C | |
| Medium compatible: | Various media compatible with the 304 stainless steel | |
| Electronic Wire: | 3 Wires | 4-5 Wires |
| Output: | 0-5V/0.5-4.5V | RS485 |
| Power Supply: | 6~9 V dc (max 12V dc) | 5 V dc |
| Zero Temperature Drift | 0.005%/20°C | |
| Temperature output: | Suitable for CAN communication | |
| Electronic connection: | Fixed cable by stainless steel cap and Explore Proof and water proof IP67 | |
| Process connect port: | M16*2.0 male, G3/8" male... (by customized) | |
| Response time: | First time starting time $\approx 2s$; working status $\leq 200ms$ | |
| Medium compatible: | Diesel, gasoline, water and others fuel or liquid is customized | |
| Certificate approve: | CE Certificate and Exia II CT6 and Exd II CT5 | |
| EMC Standard: | electromagnetic radiation: EN50081-1/-2 electromagnetic susceptibility: EN50082-2 | |
| Remarks: | Special applications request by customized | |

III. Dimension and Drawing:



IV. Electronic Connections:



| | | | |
|--|---|-------|-------|
| 4-20mA 2-wire | A | +Vcc | Red |
| | C | +Iout | Black |
| 0.5-4.5 VDC 0-5 VDC 0-10 VDC 3-wire | A | +Vcc | Red |
| | C | GND | Black |
| | D | +Vout | Green |

(* Digital Signal Electronic Wires Connections Following Operate Manuals.)

V. Part Number Code Table For Level Range:

| | | | |
|-----|---------|-----|------------|
| 000 | 0-100mm | 008 | 0-900mm |
| 001 | 0-200mm | 009 | 0-1000mm |
| 002 | 0-300mm | 010 | 0-1100mm |
| 003 | 0-400mm | 011 | 0-1200mm |
| 004 | 0-500mm | 012 | 0-1300mm |
| 005 | 0-600mm | 013 | 0-1400mm |
| 006 | 0-700mm | 014 | 0-1500mm |
| 007 | 0-800mm | 015 | Customized |

VI. Order Information

| | | | | | | | | |
|--------------------------------|--|----------|----------|------------|----------|----------|----------|----------|
| P/N Selection | LC12S (Model) | 3 | 1 | 007 | 3 | 0 | D | G |
| Output | 3= 0.5-4.5V 4= 0-5V 5=RS485 | | | | | | | |
| Process connetion | 1=M10*1.0 2=G3/8" male | | | | | | | |
| Pressure Measurment | See last pages Pressure Range Code Table and select your requested range code adhere here. | | | | | | | |
| Measurding Medium | 1= water 2=Gasonlie 3=Diesel 4=Others liquid by | | | | | | | |
| Accuracy | 0=1.0%F.S. 1=0.5%F.S. | | | | | | | |
| Probe Diameter | D=12mm | | | | | | | |
| Pressure type | G=Gage S=Sealed A=Absolute | | | | | | | |